

**General Notes:**

This report contains results for all requested analyses.

All samples were received intact and at proper temperature.

Where applicable, sample results are qualified based on the highest level concentrations of field QC contamination found in the field, equipment, or trip blanks.

Unless otherwise noted below, all required instrument and method QC was run and was within criteria.

**Metals Analysis Note:**

Uranium, strontium, lithium, tin, and titanium were analyzed as an on-demand analysis.

The quantitation limits for several samples for tin were qualified estimated "UJ" due to a quality control sample outside of acceptance limits.

The quantitation limit for uranium for sample 1203001-12 was qualified estimated "UJ" due to the absence of a second source quality control sample.

**Glycols by HPLC/MS/MS Note:**

Samples were analyzed for diethylene glycol (DiG) (CAS# 111-46-6), triethylene glycol (TriG) (112-27-6), tetraethylene glycol (TeG) (112-60-7), 2-butoxyethanol (2-Bu) (111-76-2) and 2-methoxyethanol (2-Me) (109-86-4) by HPLC/MS/MS (inst id: TQD-LCMSMS) on a Waters Atlantis dC18 3um 2.1 x 150mm column (s/n- 0141301481).

An HPLC/MS/MS method does not currently exist for these analytes. ASTM D 7731-11 and EPA SW-846 Methods 8000C and 8321 were followed for method development and QA/QC limits where applicable. All applicable OASQA On Demand QA/QC protocols were followed.

All QC were within criteria. The quantitation limit for DiG was raised to 50ug/L and the quantitation limit for 2-Bu was raised to 25ug/L because of instrument response during initial calibration. On Demand protocols include the analysis of a low level blank spike at the quantitation limit. All low level blank spikes were within the OASQA limits of 60-140% recovery and are as follows: DiG: 66%, TriG: 61%, TeG: 66%, 2-Bu: 75%, 2-Me: 108%.

The aqueous samples were injected without extraction onto the HPLC/MS/MS system.

Refer to notes in the case file for additional information regarding the analysis.

**SVOAs Analysis Note:**

All samples were extracted by EPA SW-846 Method 3520C followed by analysis using EPA SW-846 Method 8270D. Refer to notes in case file for additional information regarding the analysis.

Results for sample 1203001-08 are suspect. Although all QC and lab blanks are acceptable for sample 1203001-08, low levels of certain compounds detected indicate possible glassware contamination.

The multiple TICs found in sample 1203001-01 are likely due to extraction of a pH strip that fell in the jar and was not able to be removed.

For this project one additional compound is added to the SVOC analysis; 1-methylnaphthalene. This is a non-routine analysis. All current in-house quality control limits were met.

For all samples, quantitation limits for 2,4-dinitrophenol are qualified estimated "UJ" due to exceeding calibration limits. For most samples, quantitation limits for benzo(k) fluoranthene are qualified estimated "UJ" due to exceeding calibration limits.

For all samples, quantitation limits for 2,4-dinitrophenol are elevated due to zero percent recovery in the low-spike quality control check (BS1) and mid-low-spike quality control check (BS3). Results for the mid-level spike quality control check (BS2) are within acceptance limits; therefore, quantitation limits are raised to the mid-level value. For all samples, quantitation limits for 4,6-dinitro-2-methylphenol are qualified estimated "UJ" due to low percent recovery in the low-spike quality control check (BS1). In the report, only 21 compounds are reported for blank spike quality control check samples. Quality control information about the additional spiked compounds is available in the case file.

Results for a limited number of compounds found in all samples have been qualified "B" because of contamination found in

either the method blank, field blank, or equipment blank.

**VOA Analysis Note:**

Acrylonitrile was analyzed on-demand using CLP equivalent methodology. This analyte does not appear in the data tables or the QC summary and all data for this compound is summarized here. Acrylonitrile was not detected in any of the samples above a quantitation limit of 2 ug/L. A four point curve was analyzed (2, 5, 10, and 20 ug/L). The samples were preserved to a pH<2 with HCl. A low level second source blank spike analyzed at a concentration of 2 ug/L had a recovery of 99%. A mid level second source blank spike analyzed at a concentration of 10 ug/L had a recovery of 101%. Matrix spike/matrix spike duplicate analysis was performed for sample 1203001-04. Matrix spike recoveries were 102% and 94%.

2-Chloroethylvinyl ether is not included in the analysis. 2-chloroethylvinyl ether breaks down in acidified samples.

**TSS/TDS Analyses Note:**

All required instrument QC was run and was within the required criteria.

**Nitrite/Nitrate and Total Nitrogen Analysis Note:**

Samples were run as an on-demand analysis.

All required instrument QC was run and was within the required criteria.

As required for this project, sample results for nitrate/nitrite were qualified "B" when the value was less than 10X the value reported for contaminated blanks. All samples with detectable results were qualified "B" due to field blank (FB21) contamination.

**Anions Analysis Note:**

As required for this project, sample results were qualified "B" when the values for chloride were less than 10X the value reported for the field blanks. Several samples were qualified "B" due to field blank (FB20) contamination.

All required instrument QC was run and was within the required criteria.